

through another by the superior pressure of the surrounding column upon its under surface, and therefore that it is impelled upwards. We have also seen that the action of chimneys is produced simply by rendering one portion of air lighter than that by which such portion is surrounded, by which means it is impelled upwards; and hence we are bound to conclude that this action is not that of "draught," but of an impelled current, the impelling power being produced by rarefaction.

TBA.

#### THE GENEALOGY OF THE FINE ARTS.\*

THIS brings me to the third branch of my subject, viz., the beautiful in art itself. Nature drunk in by the mind, as shown under the former head, is the seed for the production of a new world,—the world of art, which exists for the same purpose as its prototype, to satisfy the sense of beauty in the human breast. From a chaos of sensations previously awakened by the aspect of external nature in the mind of man, this new and fairer creation rises. A more perfect system, freed from the blemishes and faults of the first, is thus established in the sphere of art: the materials and principles, luxuriance and comprehensiveness, are derived from nature; while the fostering love of the beautiful, as the inspiration in the soul, gives it harmonious unity and depth.

Art is therefore something more than a transcript of nature even in her highest charms: it is essentially spiritual. It does not come from nature direct, but is refined and exalted in the mind. If art were no more than a reproduction of nature, it would be the inferior, as the imitator must ever be behind the original. But art takes higher ground; she has a dignity peculiar to herself, an essence of her own, which wins her the advantage. Art appropriates the principles and elements of nature, but, in their passage through the mind, a fresh image is stamped upon her types. They receive a new lustre from the soul, a ray of the beautiful from within. The artist may exercise his genius upon a perishable material, but something from the immortal part of himself has mingled in his conceptions, and this gives to works of art infinitely greater interest than their originals could have. The main difference between architecture and the other arts of design is this,—architecture springs out of physical necessity, while the other fine arts have beauty for their sole object. Architecture is the application of abstract beauty, as much of it as can be applied, to the embellishment of the useful, that is to say, to the forms and elements of necessity. I say, forms of necessity; but some of the general forms of architecture are struck out or foreshadowed by nature herself. But the disadvantage of architecture is, that the useful must, in some measure, qualify the beautiful. Painting and sculpture have beauty for their essence, but architecture is a clothing, or pervading, the useful with the spirit of the beautiful. It is, however, the human architect, so far as consistent with the different scale of his enterprise, following in the footsteps of the Divine. That the primitive wood cabin was its type, may well be questioned. Infancy is as much the type of manhood. Architecture has better types, a richer dower; it has all nature, from the human form and face to the most insignificant plant or mineral: all yield their lesson to the architect. It draws not literally, however, from them. It is not a direct, but an analogical imitation of nature.

But art, taken generally, is an embodiment of an invisible archetype in the artist's mind, his *beau idéal*; but which he models upon nature as a basis: it is nature transfigured, glorified, by its contact with humanity. Of all created beings, man, particularly as refers to the manifestation of his mind and character, is the most interesting to man; an object, therefore, on which is impressed human feeling and intelligence, possesses, in consequence, a greater interest than by any other extraneous circumstances it could receive. Works of real art are the works of God brought through the mind of man; and therefore doubly "good," beautiful, and divine.

Art may, in this light, be considered as a supplement which the human mind adds to nature. It is a sequel to her original beauty.

Like "the metamorphosis of things into higher organic forms," is their change from nature into art. The mind or imagination of the artist is a mirror that gives back the forms and hues of nature, but heightened and refined: while painting and sculpture array with second life some glorious action, some heroic deed of the past, architecture clothes with new vitality and beauty the forms of external nature.

The sculptured Jupiters and Minervas of the ancients, and the rest of their petrified goddesses and nymphs, are therefore, as remarked under the preceding head, not copies from nature, but from a vision of beauty in the mind of the artist, inspired indeed by nature, but exalted in the mind, and possessing more of perfection than any individual.

But whilst showing the advantage of art over nature in this respect, let us do justice to the latter. The eye requires education and constant practice even to see truly the beauties of nature. All does not lie upon the surface. In the lowest walk of art there is scope for the highest mind. The most gifted eye cannot exhaust the significance of any object, and "in the commonest human face," to quote Fuseli, "there is more than Raphael will take away with him."

We cannot compete with nature on the same ground. For the production, for instance, of powerful light and shade in a picture, an artist must take advantage of the local colour of objects, and place dark ones in the shade, and white ones in the light; while, such is the intensity of light in nature, that she can produce her effects independently of local colour,—effects more gorgeous and potent than the artist, with all the contrivances of art, and of science to boot, is able to reach.

Moreover, the effects in nature are nearly always fine. Natural objects, whether viewed singly or in groups, must be almost invariably picturesque, for both the linear and aerial perspective operate upon them on the most unerring principles—an advantage which the artist, from some error in applying the science, may miss. Light and shade, and reflection, which the artist can but imperfectly comprehend and represent, are also, in nature, acting unerringly.

The artist of a fine perception, is, therefore, of all others, the least satisfied with what he produces, as he is the most capable of seeing the truthfulness and transcendancy of nature. He is also the most capable of seeing the immense distance between her common-place, every-day, effects, and those which she sometimes exhibits to the educated and poetic eye.

The comparative feebleness of art is further apparent when we consider, in the greatest works of art, how few the beauties, how many the faults; how seldom we find a picture that is good in more than one department of the art! The great colourist is deficient in composition; one wonderful in conception and composition, may have no idea of colour; while the master of chiaroscuro is a novice in everything else; suggesting the fact, that only the union of the talents of several artists, supposing that possible, could secure a full, truthful rendering of nature. Each of these important departments has had its respective master, but where is the magician who, uniting their varied excellencies in one production, can conjure up before us the entire spirit and sentiment of nature, and reveal to us the whole mystery of creation?

Besides, from nature comes every element of art; within her sphere lies all the inspiration of genius. An abstract idea of beauty, it is true, exists in the mind, transcribed from no individual object or creature. But, as Pope says, from what can we reason but from what we know? so, we may inquire, what can we conceive and image to ourselves, but from what we have seen? The first part of genius is a strong susceptibility to the influence of beauty in nature. And the Muses were rightly conceived as the daughters of memory: the great ideas which the Raphaels and Titians have sought to embody, however gradual their growth, have been indebted to nature for every stage of their advancement.

Architecture, as we have seen, in common with all the fine arts, derives its principle of beauty from nature; but, unlike the rest, it is indebted to nature for something else, closely allied to, and in some measure interwoven with, the other, viz. constructive principle. Struc-

ture is an important element of architecture, and fortunately for us, the affinity between it and nature extends also to construction. Of this fact many illustrations could be given, and of the use made of it by architects. The constructive principle of St. Bride's Church steeple at London, with its spiral staircase and newel, it is well known, was derived by Sir C. Wren from a common form of spiral shell. The dome of the Cathedral of Florence owes its origin to the structure of the human skull, the peculiarity of which is its combining strength with lightness. The naval architect has obtained valuable hints for ship-building from the structure of shells. The figure of the duck originally suggested the form of the ship, and certainly the finest models, the best for contending with winds and waves, are those that most resemble their original, as the Dutch galliot will attest.

But, as in art, so in science, we cannot directly compete with nature; we cannot teach her wonderful mathematical skill,—the nice balance of forces,—resistance, and strain; we must waste our material, and, after all, be behind in that certainty which characterises her engineering enterprises, and which is visible in her most ordinary productions.

Let us glance for a moment over the empire of art, with an eye to this analogy with nature. In music's various moods and instruments we recognise the various hymns of nature,—the murmuring stream, the melody of birds, the wind upon the shore in "vocal reed," which are music's acknowledged types. Many oft-used expressions, as "a tide of harmony," "floods of melody," "gush of song," are confessions of this analogy. Campbell speaks of the "stormy music of the drum;" Shakespeare makes music the food of love, and compares its dying fall to a gentle wind stealing over violets; and Milton's "heavenly host"

"Sang hallelujah as the sound of seas."

In the department of architecture we shall find equal interest. The "twilight grove" is seen in the temple colonnade, or "dim religious aisle." The "awe-inspiring dome" speaks of the canopy of the skies—the celestial hemisphere—which has in some instances been its model. The beautiful curves of the capitals and shafts of the antique columns are at least suggested by lines in nature. The earliest Egyptian column was a stalk of the lotus, capped by its calyx; and its base was, in all probability, the foot of the same plant, where it issues from the root.

All descriptions of design are varied pictures or reflections of nature. Whether a single edifice, or group of edifices, or picturesque avenue, be the object of our admiration as a work of art, one source of our pleasure must be a recognition of principles dictated by nature, and a recollection of corresponding effects in her wide domain.

Every true style has its types in nature, every shade of character its corresponding expression there. The principles of design have been learnt in her school. In the decoration of architecture we shall find nearly the whole of the vegetable kingdom, which, though not literally copied, are yet the most easily traced. No department of creation seems better adapted for decoration in the arts of architecture, sculpture, &c., than this: plants, their foliage, flowers, fruits, have accordingly been more extensively employed, as the basis of ornamentation, than any other objects. In some Gothic buildings the abundance of floral decorations render them rivals, in point of luxuriance, of Nature herself. Plants were very early thus employed. The almond, pomegranate, and flowers were chosen, even in the wilderness, by divine appointment, to give form to the sacred utensils; and, down to the present time, the ivy, lotus, acanthus, palm, vine, oak, and other beautiful objects of the vegetable creation have been the subjects of the chisel, and have given life and expression to architecture and the arts of decoration.

The types of art are in nature, but art, as before shown, cannot be entirely referred to that source. The soul of man has had part, and through that part may, generally, be read much that is interesting of the character and history of the times that produced it. The monuments of art are always the true representatives of the physical, moral, and intellectual state of man. They are the exponents of his